



City of Columbia, Missouri
Community Development Department

INTER-OFFICE MEMO

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SUBJECT: Stormwater Management in Redevelopment – Level of Service

The City of Columbia Stormwater Management and Water Quality Manual contains reduced requirements for water quality for redeveloped sites. Fig. 6.8.1 is a flowchart which contains the following text*:

“For the second land disturbance permit required since October 1, 2012, the Level of Service (LOS) required will be increased by 2, and shall be applied to 1/3 of the site. For each subsequent land disturbance permit requested, the LOS shall be increased by 2 until the cumulative LOS of 8 for the entire site is reached. The area the LOS is applied to shall increase by one-third (1/3) of the site until the entire area of the site is being used.”

**This text was inadvertently truncated in the flowchart in the printed version of the manual.*

This memo clarifies what is meant by applying a certain Level of Service (LOS) to 1/3 (or another fraction) of the site.

In the LOS calculation, the Value Rating (VR) of each stormwater BMP is multiplied by the area it treats, resulting in an area-weighted VR. A VR of zero is applied for untreated areas. The weighted VR is then totaled for the entire site, and this total site weighted VR is divided by the total site area to arrive at the calculated LOS. The LOS requirement is met if the calculated LOS meets or exceeds the required LOS.

When the manual talks of applying a certain LOS to a fraction of the site, this can be thought of as using the above process for calculating total site weighted VR, but instead of dividing it by the total site area to calculate the LOS, it should be divided by that fraction of the total area.

As an example, assume that a Level of Service of 4 is required over 1/3 of the site. The total site weighted VR should be calculated as usual. Divide this by 33% of the site area. If the calculated $LOS \geq 4$, then the requirement is met.